

2 channels output & 8 channels input differential acquisition card



PM 6181 is a dynamic signal acquisition card designed specifically for high cost performance.

8 channel analog signal input with IEPE constant current source exciter, which is used to regulate IEPE power supply sensors such as microphone, artificial ear, accelerometer, etc

2 channel analog output, 2 channel power amplifier, are used to drive artificial mouth, speaker and other high-power load.

General specifications

Overall parameters	
Analog input channel	8
Analog output channel	2
IEPE channel	8
IEPE power	24V
power amplifier channel	2 channel
power amplifier	16w (each channel)
BUS	USB
Dimension(mm)	240*240*76
Connection type	BNC
Working temperature	-20°C~50°C

General features

- 2 channels output, 8channels input
- Differential signal
- Highly integrated, built-in IEPE power supply, built-in power amplifier channel
- Positioning production line mass production acoustic testing

AI Analog acquisition channel parameter

AI Analog acquisition channel	
ADC precision	24 Bit
ADC type	Δ - Σ
Sampling rate range	1kHz~192kHz
FIFO Buffer size	1024
Data transmission mode	DMA
Input voltage range	+/- 4.5Vrms
Gain error	+/- 0.03dB
Input impedance	Between positive input and ground: 1Mohm
Flatness	20Hz~20kHz, Typical value:+/- 0.03dB 5Hz~50KHz, Typical value:+/- 0.2dB AI -3dB Bandwidth:1.5HZ~75KHZ

AI Idle noise (uVrms)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	10	11	11
Maximum value	16	16	16
Annotation: [1]Short circuit source impedance is less than50Ω, Working temperature 23±5℃ [2]IEPE Off			

AI SNR (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	110	110	110
Minimum value	105	105	105
Annotation: [1]Differential input, AC coupling, Input signal 1kHz Sine wave, 0dBFS(4.5Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight,IEPE Off			

AI dynamic range (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	107	107	107
Minimum value	104	104	104
Annotation: [1]Differential input, AC coupling, Input signal 1kHz Sine wave, -1dBFS(4.5Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight,DR test			

AI THD+N (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-103	-101	-101
Maximum value	-98	-96	-96
Annotation: [1]Differential input, AC coupling, Input signal 1kHz Sine wave, -1dBFS(4.05Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight,IEPE Off			

AI THD (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-105	-104	-104
Maximum value	-100	-99	-99
Annotation: [1]Differential input, AC coupling, Input signal 1kHz Sine wave, -1dBFS(4.05Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight,IEPE Off			

AI Cross talk (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-106	-106	-106
Maximum value	-103	-103	-103
Annotation: [1]Differential input, AC coupling, Input signal 1kHz Sine wave, -1dBFS(4.05Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight,IEPE Off			

AO Analog acquisition channel parameter

AO Analog acquisition channel	
DAC precision	24 Bit
Sampling rate range	1kHz~192kHz
Output voltage range	+/- 3Vrms
Gain error	+/- 0.03dB
Output impedance	Positive input to negative input: 1ohm
Flatness	20Hz~20kHz, Typical value:+/- 0.05dB 5Hz~50kHz, Typical value:< +/- 0.6dB AO -3dB Bandwidth:3.5HZ~82KHZ

AO Idle noise (uVrms)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	12	12	12
Maximum value	15	15	15
Annotation: [1]Acquisition device impedance is greater than 1Mohm, Working temperature:23±5℃			

AO SNR (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	110	110	110
Minimum value	105	105	105
Annotation: [1]Differential output, AC coupling, out signal 1kHz Sine wave, 0dBFS(3Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight			

AO Dynamic range (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	105	105	105
Minimum value	100	100	100
Annotation: [1]Differential output, AC coupling, out signal 1kHz Sine wave, -1dBFS(2.7Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight			

AO THD+N (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-99	-96	-99
Maximum value	-95	-95	-95
Annotation: [1]Differential, AC coupling, output signal 1kHz Sine wave, -1dBFS(2.7Vrms) [2]Bandwidth is 22.4K、45K、51K [3]Linear weight			

AO THD (dB)			
Sampling rate	fs=48kS/s	fs=96kS/s	fs=102.4kS/s
Typical value	-106	-106	-106
Maximum value	-100	-100	-100

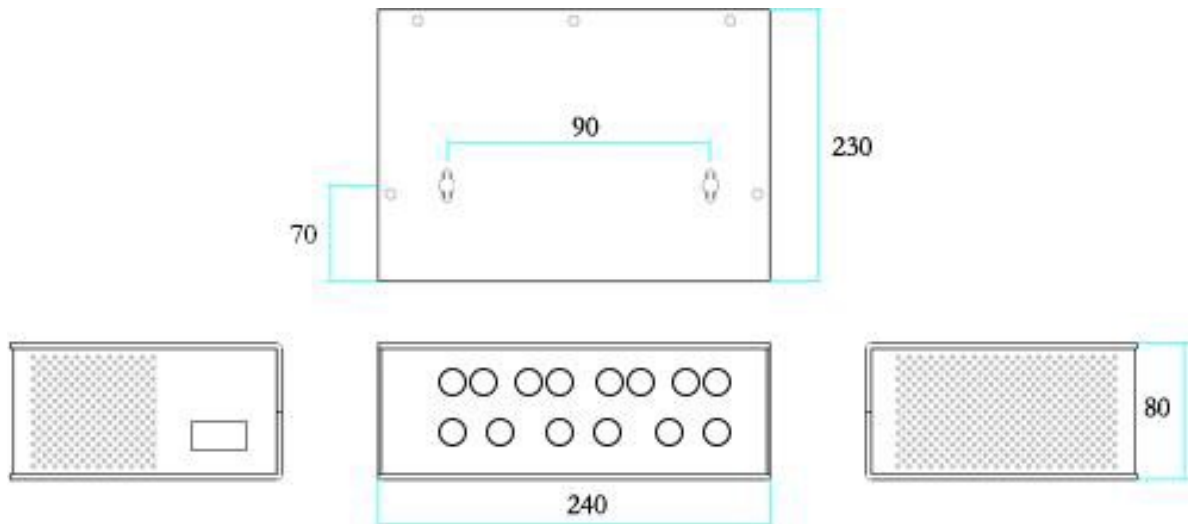
Annotation: [1]Differential output, AC coupling, output signal 1kHz Sine wave, -1dBFS(2.7Vrms)
 [2]Bandwidth is 22.4K、45K、51K
 [3]Linear weight

AO Cross talk (dB)			
Sampling rate	$f_s=48kS/s$	$f_s=96kS/s$	$f_s=102.4kS/s$
Typical value	-100	-100	-100
Maximum value	-97	-97	-97

Annotation: [1]Differential output, AC coupling, output signal 1kHz Sine wave, -1dBFS(2.7Vrms)
 [2]Bandwidth is 22.4K、45K、51K
 [3]Linear weight

Product size

Company: mm



MegaSig reserves the right to change specifications and accessories without notice.



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Shenzhen MegaSig Measurement & Control Technology Co.,Ltd

Tel: 0755-8950.8393 Fax: 0755-8950.8392

Sales email: sale@megasig.com

Technical support email: support@megasig.com

Address: Room 1002, Unit 2, Building 1, Hongxing Chuangzhi Plaza, Guangming District, Shenzhen,China